



BPA Imbalance Activity Report

December 2013

Generation Imbalance

	MWh	\$ thousand
wind		
over generation	(48,556)	\$ (1,996)
under generation	28,272	\$ 1,214
other		
over generation	(4,961)	\$ (237)
under generation	2,127	\$ 97
total		
over generation	(53,517)	\$ (2,233)
under generation	30,399	\$ 1,311
total:	(23,118)	\$ (922)

Energy Imbalance

	MWh	\$ thousand
total		
over scheduling	(16,661)	\$ (765)
under scheduling	13,032	\$ 678
total:	(3,629)	\$ (87)

Persistent Deviation

actual billing may differ

sec 1, 2 & 3	events	MWh*	\$ thousand*
Negative (generation greater than schedule)			
wind	7	(741)	\$ 35
other	8	(2,290)	\$ 108
total	15	(3,031)	\$ 143
Positive (generation less than schedule)**			
wind	15	1,478	\$ 63
other	0	-	\$ -
total	15	1,478	\$ 63

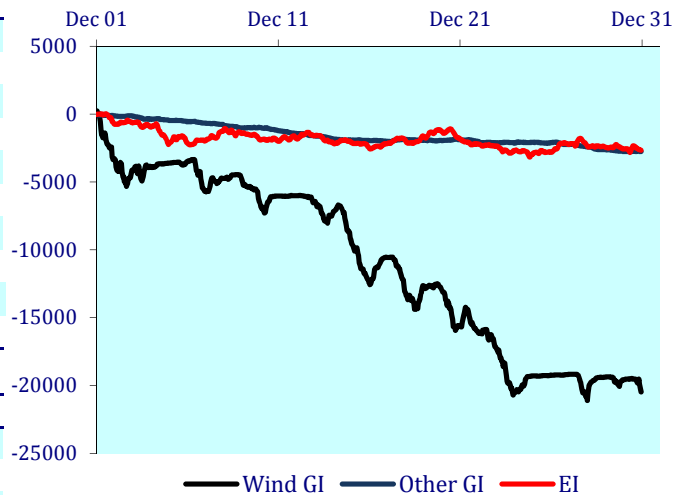
*charge estimate excludes test projects

**charge estimate does not include GI

Persistent Deviation events and waivers

	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013
	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec
events												
total	35	35	26	30	50	30	60	34	41	37	37	30
MWh negative	-1904	-1487	-1011	-1526	-4880	-1495	-2480	-1943	-3297	-1278	-1039	-3031
MWh positive	3130	1567	1393	2122	1372	1289	2867	1514	2095	1436	1292	1478
waiver requests												
total	2			2	1							
MWh negative	-1037			-734	-286							
MWh positive	108			90								
granted waivers (full)												
total	2											
MWh negative	-1037											
MWh positive	108											
granted waivers (partial)												
total												
MWh negative												
MWh positive												

MWh of accumulated imbalance



Persistent Deviation Events

	3-hour	6-hour	12-hour	24-hour	Pattern	total
Negative (generation greater than schedule)						
wind	7	0	0	0	0	7
other	1	0	1	6	0	8
total	8	0	1	6	0	15
Positive (generation less than schedule)**						
wind	14	1	0	0	0	15
other	0	0	0	0	0	0
total	14	1	0	0	0	15

Persistent Deviation events and waivers

	2012 jan	2012 feb	2012 mar	2012 apr	2012 may	2012 jun	2012 jul	2012 aug	2012 sep	2012 oct	2012 nov	2012 dec
events												
total	14	25	24	40	45	41	46	49	25	47	31	52
MWh negative	-476	-1732	-1998	-3999	-2918	-3733	-1873	-2954	-1254	-2530	-3104	-4655
MWh positive	855	1540	1165	3683	3378	2030	2559	1722	1345	2982	1073	2470
waiver requests												
total		4	17	21	4		2		1	1		6
MWh negative		-194	-390	-1156					-361	-26		
MWh positive		698	3309	3097	1184		834					899
granted waivers (full)												
total		3	17		2							3
MWh negative			-390									-261
MWh positive		698	3309		394							
granted waivers (partial)												
total							1					
MWh negative												
MWh positive							50					

BPA Imbalance Activity Report reference guide

Generation Imbalance

Imbalance = Estimated Generation - Actual Generation

over generation	Estimated Generation < Actual Generation, negative value
under generation	Estimated Generation > Actual Generation, positive value

Energy Imbalance

Imbalance = Actual Load - Scheduled Load

over scheduling	Actual Load < Scheduled Load, negative value
under scheduling	Actual Load > Scheduled Load, positive value

Persistent Deviation

Definition

section 1 & 2	All hours or schedule periods in which either a negative or positive deviation exceeds both 15 % of schedule and 20 MW for three consecutive hours or more or both 7.5 % of schedule and 10 MW for six consecutive hours or more or both 1.5 % of schedule and 5 MW for twelve consecutive hours or more or both 1.5 % of schedule and 2 MW for twenty-four consecutive hours or more in the same directions.
section 3	A pattern of either positive or negative deviation that occurs generally or at specific times of day.

Penalty

Negative	No credit is given for negative deviation.
Positive	For positive deviation, the charge is the greater of 125% of BPA's highest incremental cost that occurs during that day or 100 mills per kilowatt-hour.

**charge estimate excludes test projects* New projects in test mode (up to 90 days) are exempt from the Persistent Deviation Penalty charge. However, Persistent Deviation events are still tracked.

***charge estimate does not include GI* The Persistent Deviation section of this report shows the penalty component of the charge, i.e. \$100/MWh less GI rate